

From: [Bruce Scott Kennington](#)
To: [Granger, Michelle](#)
Cc: [Hauber, Erin M CIV USARMY CENWK \(USA\)](#)
Subject: RE: Pohatcong OU3 - RAWP Addendum and follow-up questions
Date: Thursday, October 17, 2019 4:16:32 PM

Received, Michelle.
Thank you for the quick review and feedback.
I will immediately get with our to address the item for clarification.
Sincerely,
Bruce
Bruce S Kennington
Principal

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From: Granger, Michelle <Granger.Michelle@epa.gov>
Sent: Thursday, October 17, 2019 3:11 PM
To: Bruce Scott Kennington <bkennington@ramboll.com>
Cc: Hauber, Erin M CIV USARMY CENWK (USA) <Erin.M.Hauber@usace.army.mil>
Subject: RE: Pohatcong OU3 - RAWP Addendum and follow-up questions

Hi, Bruce-

Thank you for your responses to EPA's questions. We have reviewed the responses and need further clarification on a few. Please see the attached table. If you have any questions, feel free to reach out to me. Also, please incorporate your clarification/responses into the next submittal (Addendum #1). We look forward to reviewing it.

Thank you!

Michelle-

From: Bruce Scott Kennington <bkennington@ramboll.com>
Sent: Monday, October 14, 2019 6:10 PM
To: Granger, Michelle <Granger.Michelle@epa.gov>
Cc: Hauber, Erin M CIV USARMY CENWK (US) <Erin.M.Hauber@usace.army.mil>; Bradley J. Brink (<Bradley.J.Brink@usace.army.mil> <Bradley.J.Brink@usace.army.mil>; Stonestreet, Wendy E CIV USARMY CENWK (USA <Wendy.E.Stonestreet@usace.army.mil>; rich.e.gajdek@usace.army.mil; patrick nejand <patrick.c.nejand@usace.army.mil>; Neal F. Kolb P.E. (<Neal.F.Kolb@usace.army.mil> <Neal.F.Kolb@usace.army.mil>; Hidalgo, Luis (G&I) <Luis.Hidalgo@riotinto.com>; Gibson, Bradley (G&I <Bradley.Gibson@riotinto.com>; Gorm Heron (<GHeron@thermalrs.com> <GHeron@thermalrs.com>; Chris Blundy (<cblundy@thermalrs.com> <cblundy@thermalrs.com>; Chris Thomas (<cthomas@thermalrs.com> <cthomas@thermalrs.com>; Scott Tarmann (<starmann@ramboll.com>

Subject: RE: Pohatcong OU3 - RAWP Addendum and follow-up questions

Dear Michelle:

On behalf of Pechiney Plastics Packaging, Inc. (PPPI), the Primary Settling Defendant for the Remedial Design/Remedial Action Consent Decree (CD)¹, and Luis Hidalgo (Project Coordinator for OU1(TCE)), please see the attached responses to questions orally conveyed in last week's Technical Call with USEPA and the representatives of the U.S. Army Corps of Engineers held on Oct 8, 2019, and also the follow-up questions from your below e-mail of Oct 9, 2019, regarding the proposed Addendum to the draft Remedial Action Work Plan for Operable Unit (OU)3 at the Pohatcong Valley Groundwater

Contamination Superfund (PVGCS) Site. Also attached is a proposed, revised draft RD/RA time schedule for OU3 reflecting the changes in drilling schedule and phased heating of the different groups of heaters for this Remedial Action.

We look forward to addressing what additional questions as they may arise and transmittal of Addendum No. 1 to the Agency at the earliest opportunity.

¹ In the matter of United States of America v. PPPI (Civil Action No. 09-cv-05692) and United States of America v. Bristol Myers Squibb Company, et. al. (Civil Action No. 13-cv-05798) effective March 11, 2015.

Sincerely,

Bruce S. Kennington

Principal

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-----Original Message-----

From: Granger, Michelle <Granger.Michelle@epa.gov>

Sent: Wednesday, October 09, 2019 1:54 PM

To: Bruce Scott Kennington <bkennington@ramboll.com>

Subject: Pohatcong OU3 - RAWP Addendum and follow-up questions

Hi, Bruce-

Thank you for yesterdays call. Below are follow-up items and questions. Please keep in touch and let me know if you have any questions.

Best,

Michelle-

Follow-up Items from 10/8/19 call with Ramboll and Rio Tinto re: change in thermal vendor and impact to design approach.

- * Please keep USEPA informed of any interim informational submittals, conference calls and the schedule for submittal of the RAWP Addendum to ensure an expedited review.

- * Informational Requests: The FlexHeaterSM heating technology was recently patented by TRS Group. If available, please provide a project example demonstrating successful heating with this newly patented TCH technology.

Considerations for the RAWP Addendum:

- USEPA's primary concerns with the change in the heating and contaminant recovery strategy are:
 - o Removal of the previously proposed vapor recovery infrastructure co-located with each heater can and screened across the full length of thermal treatment zone and replacement with a passive venting system (i.e., a 2-inch, sand filled annulus around each heater can) which includes a short vapor extraction screen or chimney above the thermal treatment zone
 - o The level of effort associated with collecting soil confirmation samples
- The following RD appendices require updates:
 - * Appendix B: Thermal Model Simulation Report (or Energy/Mass Balance equivalent)
 - * Appendix D: Design Drawings
 - * Appendix H: OM&M (including vendor safety plan and treatment system sampling)
- * The following RAWP appendices require updates:
 - * Appendix B: CQAP (some of the checklists)
 - * Appendix H: Contingency Plan – please include discussion of hazard analysis associated with drilling adjacent to active heating zone. Can drilling adjacent to an active heating zone, e.g., Group A, be performed as soon as practical in the drilling sequence to reduce the possibility of intercepting steam?

- * Wellfield layout changes (interim deliverable?):
- * Will the treatment zone or the heated zone change from what was presented in the 100% RD?
- * Will the spacing of the heaters change?
- * Will the temperature of the heaters be monitored in situ?
- * Will there be any changes to the indoor air monitoring program?
- * Operational Duration:
 - * What is the estimated operational duration for the three stages, Groups A, B, and C?
 - * Has the amount of energy estimated to be required to reach treatment objectives changed?
 - * Is the estimated power input rate (W/m) associated with the FlexHeaterSM similar to the previous design?